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APPLICATION NO.

FILING DATE

FIRST NAMED INVENTOR

PAPER NUMBER

09/942,294

08/29/2001

Albert E. Johnstone III

8041-PA01CP

8197

27111

04/27/2004

**EXAMINER** 

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7590

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1660 UNION STREET SAN DIEGO, CA 92101-2926

ART UNIT

3635

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		<u> </u>			
	Application No.	Applicant(s)	,		
	09/942,294	JOHNSTONE E	T AL.		
Office Action Summary	Examiner	Art Unit	/		
i	Christy M Green	3635	IW		
The MAILING DATE of this communication app	ears on the cover sheet wit	h the correspondence	address		
Period for Reply	/ IO OFT TO EVOIDE 4 M	NITI ((0) EDOM			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reposition the statutory minimum of thirty will apply and will expire SIX (6) MONT cause the application to become ABA	ply be timely filed (30) days will be considered tir HS from the mailing date of this ANDONED (35 U.S.C. § 133).	nely. s communication.		
Status					
1)⊠ Responsive to communication(s) filed on 02 Fe	ebruary 2004.				
	action is non-final.				
3) Since this application is in condition for allowar		ers, prosecution as to t	the merits is		
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.					
4a) Of the above claim(s) 16-31 is/are withdraw	n from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-3,5-8 and 12-14</u> is/are rejected.					
7)⊠ Claim(s) <u>4,9-11 and 15</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.				
10)⊠ The drawing(s) filed on 29 August 2001 is/are: a) accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form	PTO-152.		
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s) /					
1) Notice of References Cited (PTO-892)		ımmary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		/Mail Date formal Patent Application (P	PTO-152\		
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/15/02.	6)  Other:		10-102)		

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### **DETAILED ACTION**

This is a second office action for serial number 09/942294, entitled Swivel joint apparatus and method for utility supply to a rotatable building, filed on December 18, 2000.

#### Response to Election Requirement

In response to the examiner's office action dated January 7, 2004; the applicant's election without traverse of Group 1, for claims 1-15, as drawn to a swivel joint apparatus in Paper No. 5 is acknowledged. Applicant timely responded to the restriction (election) requirement in Paper No. 5. Claims 16-31 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim.

#### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first fixed member, the opening of the annular chambers, a second member, the first ports of the first member and the second ports of the rotatable member of claim 1; the fixed spindle and annular flanges of the spindle, and an outer casing of the spindle of claim 2; annular sensor chamber and fluid sensors of claims 4 and 9; an electrical swivel assembly, a fixed contact core, aligned central through bores, outer contact portion of claim 12; a rotary connector, a fixed part of the connector, fixed electrical service lines, conductors, of claim 13; and, lower fixed circular plate and upper plate and annular grooves in claim

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14; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: within claim 1, the first fixed member, the opening of the annular chambers, a second member, the first ports of the first member and the second ports of the rotatable member are unclear, is the first fixed member supposed to be the fixed spool, the lower section or another part of the invention, is the second member supposed to be the upper portion, the support beams or another part of the invention?; within claim 2, the fixed spindle and annular flanges of the spindle, and an outer casing of the spindle are unclear, is the fixed spindle supposed to be the fixed spool or another part of the invention?; within claims 4 and 9, annular sensor chamber and fluid sensors since these limitations are not within the drawings, it is unclear as to what exactly these are and where exactly they are located within the invention; within claim 12, an electrical swivel assembly, a fixed contact core, aligned central through bores, outer contact portion are unclear; within claim 13, a rotary connector, a fixed part of the connector, fixed electrical service lines, conductors are all unclear; and, lower fixed circular plate and upper plate and annular grooves within claim 14 are not clear as well. It appears

that the applicant has supplied the same specification as the parent case without modifying the specification in regards to the new limitations added within the claims. It is advised that the applicant review the specification as well as the drawings to assure that the claim limitations all correspond to the specification. Until further clarification is made, the examiner will interpret the claims to the best of her ability.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Walter, US patent # 4,877,054.

Walter discloses the claimed invention a swivel joint apparatus (figures 2 and 3), a first, fixed member (22), the first member having a plurality of annular chambers (at 32 and 38) each having an opening directed away from the first member (see attached figure 3), a second member (38) rotatably mounted on the first member, the second member extending over the chamber openings in the first member (by 98 and 82), a plurality of seals (70, 134, 146, 174, 190) between the first and second member, the first member having a plurality of first ports (44, 96) connected to the respective chambers, and the rotatable member (42) having a plurality of second ports (118, 120, 122, 124, 126) connected to the respective chambers; an inner, fixed spindle (at 22) having a series of axially spaced, outwardly projecting annular flanges defining said annular

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chambers between each adjacent pair of flanges (see attached figure 3), each flange having an outer peripheral edge (at 146, 134, 136) and at least one ring seal (146, 134) mounted on the peripheral edge of each flange, the flanges having a predetermined outer diameter (figure 3), and the second member comprises an outer casing (at 98) rotatably mounted on the spindle (42), the casing (98) having an inner diameter substantially equal to the outer diameter of the flanges (figure 3), the casing forming an outer wall of each of the annular chambers (at 82 and 98) and being in rotatable sealing engagement with each of the ring seals (70, 134, 146, 174, 190); the spindle(42) has a lower end wall (66), said first ports extending through said lower end wall (column 4, lines 34-41), and a bore (96) extending from each port through the spindle to a respective annular chamber (column 4, lines 4-8), and the second ports (118, 120, 122, 124, 126) are provided at axially spaced locations on said casing (figure 7), with at least one second port communicating with each of said annular chambers (at 98 by 96 figure 3); the annular flanges (see attached figure 3) include two end flanges (at 146) at opposite ends of the spindle (42) forming an outer end wall of respective opposite end chambers (where 98 and 32 points to), and a plurality of spaced intermediate flanges separating adjacent chambers along the length of the spindle (see attached figure 3), each intermediate flange having a pair of spaced ring seals (146) projecting outwardly from its peripheral edge (figure 3); and, the first and second parts comprise a lower fixed circular plate (40, 130) and an upper circular plate (42, 32) rotatably mounted on the lower plate, the annular chambers (see attached figure 3, 82, 98) comprising a

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series of radially spaced, upwardly directed annular grooves in the lower plate (at 214, "42" – column 4, lines 41-45).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-7, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter.

In regards to claims 5-7, Walter discloses the claimed invention as stated above in claim 1, including the first member having more than one port (80) communicating with the sewer chamber and the second member having a plurality of ports communicating with the sewer chamber (column 4, lines 1-4). Although Walter does not specifically disclose one of the annular chambers comprises a sewer chamber; the annular chambers include a water chamber and a gray water chamber; the annular chambers include a gas supply chamber; he does however, teach that it is known in the art to provide connected to the inlet manifold (80), a fluid cylinder retraction line, a fluid cylinder extention line, a vacuum cup line, a pressure line for the vacuum cup, a tray vacuum line, a vent and a nitrogen line (column 4, lines 1-4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a sewer chamber, a water chamber, a grey water chamber, and a gas supply

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chamber as taught by Walter with both fluid lines, the vacuum line, and the nitrogen line in order to provide utility functions for a rotary switch or valves.

In regards to claims 12 and 13, Walter discloses the claimed invention as stated above, except for an electrical swivel assembly mounted above said first and second members, the swivel assembly comprising a fixed contact core secured to the first member and an outer rotating contact portion secured to the second member, the first and second members and contact core having aligned central through bores and the outer contact portion having contacts; a rotary connector mounted on said electrical swivel assembly, the connector having a fixed part, first and second members and electrical contact core, and a rotary part rotatably mounted on the fixed part and having conductors, the rotary part being coupled to the outer rotating contact portion of the electrical swivel. However, Walter does teach (although it is not illustrated) that it is known in the art to provide each station includes an induction heating coil, low voltage control means and various fluid supplies. Each sealing head is carried vertically movable support including an extensible fluid motor in the form of a double acting cylinder, the fluid and electrical lines to each sealing head is supplied through a supply unit; therefore It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an electrical swivel assembly on the first and second members, and a rotary part mounted on the fixed part with conductors for the electrical lines as taught by Walter in order to allow a multiple work station machine with electrical and fluid connections to be made with each work station in a timed relation (column 1, lines 7-13).

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# Allowable Subject Matter

Claims 4, 9-11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: within claim 4, prior art does not disclose an annular sensor chamber spaced outwardly from the ring seal or a plurality of fluid sensors mounted in the outer casing where at least one hole in the casing is aligned with a sensor chamber; within claim 9-11, each intermediate flange has a sensor chamber between a pair of ring seals, the fluid sensors mounted on the outer casing extending in the sensor chambers, the sensors having output for connecting to a control unit; and, within claim 15, an annular sensor chamber between each adjacent pair of annular flanges, space from the outermost utility chamber, a plurality of upward facing circular seals mounted on the lower plate, each seal located between a respective sensor and utility chamber.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy M Green whose telephone number is 703-308-9693. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 3, 2004

Carl D. Friedman
Supervisory Patent Examiner

Group 3600